SEQUENCE LISTING

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<140> 09/225,502
<141> 1999-01-06

<150> 60/070,875
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100 105 110

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Glu Arg Arg Arg Leu Ile Val Pro Pro His Leu Gly Tyr Gly Ser Ile
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Leu Leu Arg Pro Pro His Cys Pro Arg Met Val Gln Asp Gly Asp Phe
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gtc cgc tac cac tac aat ggc acc ctg ctg gac ggc acc tcc ttc gac   636
Val Arg Tyr His Tyr Asn Gly Thr Leu Leu Asp Gly Thr Ser Phe Asp
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acc agc tac agt aag ggc ggc act tat gac acc tac gtc ggc tct ggt   684
Thr Ser Tyr Ser Lys Gly Gly Thr Tyr Asp Thr Tyr Val Gly Ser Gly
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Trp Leu Ile Lys Gly Met Asp Gln Gly Leu Leu Gly Met Cys Pro Gly
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Gly Tyr Gly Glu Gly Gly Gln Gly His Lys Gly Lys Phe Arg Arg Arg
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Arg Ala Ser Pro Ala Gly Gly Pro Leu Glu Asp Val Val Ile Glu Arg
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Tyr His Ile Pro Arg Ala Cys Pro Arg Glu Val Gln Met Gly Asp Phe
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Ser Ser Tyr Asp Arg Asn Thr Leu Val Ala Ile Val Val Gly Val Gly
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Arg Leu Ile Thr Gly Met Asp Arg Gly Leu Met Gly Met Cys Val Asn
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Glu Arg Arg Arg Leu Ile Val Pro Pro His Leu Gly Tyr Gly Ser Ile
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Val Arg Tyr His Tyr Asn Gly Thr Leu Leu Asp Gly Thr Ser Phe Asp
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        195                 200                 205
Trp Leu Ile Lys Gly Met Asp Gln Gly Leu Leu Gly Met Cys Pro Gly
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                245                 250                 255
Gly Lys Asn Gln Ala Ser Thr Tyr Ser Cys Ser Gly Cys Ile Leu His
            260                 265                 270
Glu Gly Ile Gln Pro Arg Thr Gln Gly Gly Met Lys Ser Thr Leu Gly
        275                 280                 285
Ala Thr Lys Lys Gly Cys Phe Gly Arg Ala Trp Trp Leu Thr Leu Val
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tcc ttc gac acc agc tac agt aag ggc ggc act tat gac acc tac gtc   193
Ser Phe Asp Thr Ser Tyr Ser Lys Gly Gly Thr Tyr Asp Thr Tyr Val
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ggc tct ggt tgg ctg atc aag ggc atg gac cag ggg ctg ctg ggc atg   241
Gly Ser Gly Trp Leu Ile Lys Gly Met Asp Gln Gly Leu Leu Gly Met
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tgt cct gga gag aga agg aag att atc atc cct cca ttc ctg gcc tat   289
Cys Pro Gly Glu Arg Arg Lys Ile Ile Ile Pro Pro Phe Leu Ala Tyr
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ggc gag aaa ggc tat ggg aca gtg atc ccc cca cag gcc tcg ctg gtc   337
Gly Glu Lys Gly Tyr Gly Thr Val Ile Pro Pro Gln Ala Ser Leu Val
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ttt cac gtc ctc ctg att gac gtg cac aac ccg aag gac gct gtc cag   385
Phe His Val Leu Leu Ile Asp Val His Asn Pro Lys Asp Ala Val Gln
        115                 120                 125

cta gag acg ctg gag ctc ccc ccc ggc tgt gtc cgc aga gcc ggg gcc   433
Leu Glu Thr Leu Glu Leu Pro Pro Gly Cys Val Arg Arg Ala Gly Ala
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145                 150                 155                 160

ctc ttc gat tcc agc tac tcc cac aac cac acc tac aat acc tat atc   529
Leu Phe Asp Ser Ser Tyr Ser His Asn His Thr Tyr Asn Thr Tyr Ile
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ggg cag ggt tac atc atc ccc ggg atg gac cag ggg ctg cag ggt gcc   577
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atc agg aca ctg tcc cgg cca tct gag acc tgc aat gag acc acc aag   769
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cac ggg gag agt gga gcc cgg gga gtc cca ggc agt gct gtg ctg ctg   1009
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            340                 345                 350

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atc aag gct caa gtg agt gag ggc aaa gga cgc ctc atg cct ggg cag   1201
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Asp Glu Glu Arg Val His Glu Glu Leu
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acagtcaccc tccctctgct gggatgaggt ccaggagcca actaaaacaa tggcagagga 1464

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Gly Ser Gly Trp Leu Ile Lys Gly Met Asp Gln Gly Leu Leu Gly Met
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Cys Pro Gly Glu Arg Arg Lys Ile Ile Ile Pro Pro Phe Leu Ala Tyr
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Gly Glu Lys Gly Tyr Gly Thr Val Ile Pro Pro Gln Ala Ser Leu Val
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Phe His Val Leu Leu Ile Asp Val His Asn Pro Lys Asp Ala Val Gln
115 120 125

Leu Glu Thr Leu Glu Leu Pro Pro Gly Cys Val Arg Arg Ala Gly Ala
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180 185 190

Cys Met Gly Glu Arg Arg Arg Ile Thr Ile Pro Pro His Leu Ala Tyr
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Met Cys Val Gly Glu Arg Arg Gln Leu Ile Val Pro Pro His Leu Ala
305                 310                 315                 320

His Gly Glu Ser Gly Ala Arg Gly Val Pro Gly Ser Ala Val Leu Leu
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Phe Glu Val Glu Leu Val Ser Arg Glu Asp Gly Leu Pro Thr Gly Tyr
            340                 345                 350

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Asp Leu Asn Lys Asp Gly Glu Val Pro Pro Glu Glu Phe Ser Thr Phe
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Asp Pro Glu Lys Thr Ile Gly Asp Met Phe Gln Asn Gln Asp Arg Asn
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gccgccccg atg gcg ttc cgg ggc tgg agg ccc ccg ccg cca ccg ctg ctc 171
Met Ala Phe Arg Gly Trp Arg Pro Pro Pro Pro Pro Leu Leu
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ctg ctg ctg ctc tgg gtg acc ggg cag gca gcg ccc gtg gcg ggc ctg 219
Leu Leu Leu Leu Trp Val Thr Gly Gln Ala Ala Pro Val Ala Gly Leu
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Cys Pro Arg Thr Val Arg Ser Gly Asp Phe Val Arg Tyr His Tyr Val
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ggg acg ttc ccc gac ggc cag aag ttc gac tcc agc tat gac aga gac 363
Gly Thr Phe Pro Asp Gly Gln Lys Phe Asp Ser Ser Tyr Asp Arg Asp
65 70 75

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Ser Thr Phe Asn Val Phe Val Gly Lys Gly Gln Leu Ile Thr Gly Met
80 85 90

gac cag gct ctt gtt ggg atg tgc gta aac gag aga cgt ttc gtg aag 459
Asp Gln Ala Leu Val Gly Met Cys Val Asn Glu Arg Arg Phe Val Lys
95 100 105 110

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Pro Pro Asn Ser Val Leu His Phe Asp Val Leu Leu Met Asp Ile Trp
            130                 135                 140

aat tct gaa gac cag gtt cag att cac acc tat ttc aag ccc ccg agt   603
Asn Ser Glu Asp Gln Val Gln Ile His Thr Tyr Phe Lys Pro Pro Ser
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tgc cct cgg acc atc cag gtg tct gat ttt gtg agg tac cac tac aac   651
Cys Pro Arg Thr Ile Gln Val Ser Asp Phe Val Arg Tyr His Tyr Asn
    160                 165                 170

ggg acg ttc ctg gac gga act ctg ttt gat tcg agt cac aat cgc atg   699
Gly Thr Phe Leu Asp Gly Thr Leu Phe Asp Ser Ser His Asn Arg Met
175                 180                 185                 190

aaa aca tat gac acg tat gtg gga att ggc tgg ctg att cct gga atg   747
Lys Thr Tyr Asp Thr Tyr Val Gly Ile Gly Trp Leu Ile Pro Gly Met
                195                 200                 205

gat aaa ggg ctg ctg ggg atg tgt gtg ggt gag aag cgc atc atc acc   795
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            210                 215                 220

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        225                 230                 235

ccc ggt cag gca tct ctg gtg ttt gat gtt gca tta ttg gac ctc cat   891
Pro Gly Gln Ala Ser Leu Val Phe Asp Val Ala Leu Leu Asp Leu His
    240                 245                 250

aac ccc aag gac agc att tcc att gag aac aag gta gta cct gaa aac   939
Asn Pro Lys Asp Ser Ile Ser Ile Glu Asn Lys Val Val Pro Glu Asn
255                 260                 265                 270

tgt gag cgg ata agt caa agt ggg gac ttt ctc acg tat cat tac aat   987
Cys Glu Arg Ile Ser Gln Ser Gly Asp Phe Leu Thr Tyr His Tyr Asn
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Gly Thr Leu Leu Asp Gly Thr Leu Phe Asp Ser Ser Tyr Ser Arg Asn
            290                 295                 300

cgc acg ttt gac acg tac att ggg cag ggc tac gtg att cct ggg atg  1083
Arg Thr Phe Asp Thr Tyr Ile Gly Gln Gly Tyr Val Ile Pro Gly Met
        305                 310                 315

gat gaa ggt cta ctt ggt gtt tgc att gga gaa aag cga ang att gtg  1131
Asp Glu Gly Leu Leu Gly Val Cys Ile Gly Glu Lys Arg Xaa Ile Val
    320                 325                 330

gtc ccg cct cac ctg ggg tat gga gag gaa gga aga ggg aat atc ccc  1179
Val Pro Pro His Leu Gly Tyr Gly Glu Glu Gly Arg Gly Asn Ile Pro
335                 340                 345                 350

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            370                 375                 380

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Ser Val Leu Ser Lys Lys Gly Asp Tyr Leu Lys Tyr His Tyr Asn Ala
        385                 390                 395

tca ctt ctg gat ggg acc ctg ctg gac tcc acg tgg aat tta ggc aaa   1371
Ser Leu Leu Asp Gly Thr Leu Leu Asp Ser Thr Trp Asn Leu Gly Lys
    400                 405                 410

act tac aat att gtt ctg gga tct ggg caa gtt gtg ttg ggg atg gac   1419
Thr Tyr Asn Ile Val Leu Gly Ser Gly Gln Val Val Leu Gly Met Asp
415                 420                 425                 430

atg ggt ctc aga gag atg tgc gtt ggc gag aaa cgg aca gtg atc att   1467
Met Gly Leu Arg Glu Met Cys Val Gly Glu Lys Arg Thr Val Ile Ile
                435                 440                 445

ccg cct cac ctg ggc tat ggg gaa gct ggc gtg gat gga gaa gtg ccc   1515
Pro Pro His Leu Gly Tyr Gly Glu Ala Gly Val Asp Gly Glu Val Pro
            450                 455                 460

ggc agt gcc gta tta gtg ttt gac att gag cts ctg gag ctg gtg gct   1563
Gly Ser Ala Val Leu Val Phe Asp Ile Glu Xaa Leu Glu Leu Val Ala
        465                 470                 475

ggc ctt cct gag ggg tac atg ttc ata tgg aat ggt gag gtg tca ccc   1611
Gly Leu Pro Glu Gly Tyr Met Phe Ile Trp Asn Gly Glu Val Ser Pro
    480                 485                 490

aac ctc ttt gaa gaa att gac aag gat ggc aac gga gaa gtc ctc ctg   1659
Asn Leu Phe Glu Glu Ile Asp Lys Asp Gly Asn Gly Glu Val Leu Leu
495                 500                 505                 510

gaa gag ttc tca gag tac att cac gcc cag gtg gca tct ggc aaa ggg   1707
Glu Glu Phe Ser Glu Tyr Ile His Ala Gln Val Ala Ser Gly Lys Gly
                515                 520                 525

aaa ctc gct cct ggc ttt gat gct gag ctg att gtg aag aat atg ttc   1755
Lys Leu Ala Pro Gly Phe Asp Ala Glu Leu Ile Val Lys Asn Met Phe
            530                 535                 540

acc aac cag gac cgg aat gga gat ggg aag gtc aca gcc gag gaa ttt   1803
Thr Asn Gln Asp Arg Asn Gly Asp Gly Lys Val Thr Ala Glu Glu Phe
        545                 550                 555

aaa ctc ara gac cag gaa gcc aaa cac gat gta act cta aac ctg gca   1851
Lys Leu Xaa Asp Gln Glu Ala Lys His Asp Val Thr Leu Asn Leu Ala
    560                 565                 570

tgaaccagat ggtgccaggg gagtacgtga caccaagcca cctgtgtggm aagacgtgca 1911

rttgarggtg caaggggtct ctcagaagtt tgcatccatt agccagtagt aggtggggtc 1971

acatagtacc tggtgtacac atcggggtgg gttgatatat ggggtgagaa gtttgggctg 2031

atcgccagtg atagtaaaca aaatctgtgn cagagggcct tagcatggga tgtgtccagt 2091

attcgaccca cgcgtccgcn tgccaaccat gatttgtgag ccttctggga aattttgtta 2151
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ttaaaggaat atatagtgtn cagacggaag ttataatcat cttggaggaa ccataagaaa 2211

aggtgtccag ggtatctata taaagagggt taaatttttt tttaacttgc tggttaaaac 2271

attttagaaa tattctagag atgggcagga gagtcaaagg gcttgcttgc cccagcagag 2331

ttcccagcag acagccatgg atattcccag cagcctgtgc aaattctgat gatggcccca 2391

cccccgcaca cggcacacgn cacatcawgc ttttccagct catcacaccc cgccccantn 2451

ngggcctacc attaatagng tatnanttgg aggntaaaag agccttttgg acagaaaact 2511

gggccaggna aaggcatntc agaccacaaa tagagaattt gattcgtcat ttgccacana 2571

agtcatctgn ttagcttntc ctttccttna nananatttn antttttttct ggaggcagag 2631

tctccctttg tcgccaggct ggagtgcagt ggtgccatct cggctcactg cagcactgtc 2691

tcggctcact gcagcktccg cctcccgtat tcaagcgatt ctcctgtctc agcctcctga 2751

gtagctggga stacaggtgt gcaccaccac gcccggctaa tttttgtatt tttagtagag 2811

acggggtttc actgtgttgg ccaggatggt ctcaatctcg acttcgtgat ccgcccacct 2871

tggcctccca aagtgttggg attacaggcg tgactcacca tgcccagcca cttagttttt 2931

tcttattccc acctttctat cccatagaac atctttttta tcttccctga accatatwga 2991

tgagataaat agggctgggg gmtgggcccc gctggtcact caacagagta tttcccttgg 3051

ccgagatgga agttttgtcc caatagatga gctgctgagt atcaacaagg tgacattttt 3111

ctgctgccca tttgtgtcct ggagacggtg gtaccctgaa ggcagaggcc agtgccgcaa 3171

gacagcaatg acagtccacc tgccgacctg attcctgcat catggaataa ccacatggct 3231

accttctatc ctctgttccc aaatggtggt ggcacttatc ctgaagtcgt caatgacttc 3291

cctttgaaac tactttattt tactaattta aactattttg tactgatgta gccctgaggt 3351

agttcatgaa aatgctgtgc actcattcca tggaataaat gttggaaagc tcatcttttc 3411

tgatataaaa tgttgaatga taaaaaaaaa aaaaaaaaaa 3451

<210> 6
<211> 574
<212> PRT
<213> Homo sapiens

<400> 6

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Met Ala Phe Arg Gly Trp Arg Pro Pro Pro Pro Pro Leu Leu Leu Leu
  1               5                  10                  15

Leu Leu Trp Val Thr Gly Gln Ala Ala Pro Val Ala Gly Leu Gly Ser
             20                  25                  30

Asp Ala Glu Leu Gln Ile Glu Arg Arg Phe Val Pro Asp Glu Cys Pro
         35                  40                  45

Arg Thr Val Arg Ser Gly Asp Phe Val Arg Tyr His Tyr Val Gly Thr
     50                  55                  60
```

```
Phe Pro Asp Gly Gln Lys Phe Asp Ser Ser Tyr Asp Arg Asp Ser Thr
 65                  70                  75                  80

Phe Asn Val Phe Val Gly Lys Gly Gln Leu Ile Thr Gly Met Asp Gln
                85                  90                  95

Ala Leu Val Gly Met Cys Val Asn Glu Arg Arg Phe Val Lys Ile Pro
            100                 105                 110

Pro Lys Leu Ala Tyr Gly Asn Glu Arg Val Ser Gly Val Ile Pro Pro
        115                 120                 125

Asn Ser Val Leu His Phe Asp Val Leu Leu Met Asp Ile Trp Asn Ser
    130                 135                 140

Glu Asp Gln Val Gln Ile His Thr Tyr Phe Lys Pro Pro Ser Cys Pro
145                 150                 155                 160

Arg Thr Ile Gln Val Ser Asp Phe Val Arg Tyr His Tyr Asn Gly Thr
                165                 170                 175

Phe Leu Asp Gly Thr Leu Phe Asp Ser Ser His Asn Arg Met Lys Thr
            180                 185                 190

Tyr Asp Thr Tyr Val Gly Ile Gly Trp Leu Ile Pro Gly Met Asp Lys
        195                 200                 205

Gly Leu Leu Gly Met Cys Val Gly Glu Lys Arg Ile Ile Thr Ile Pro
    210                 215                 220

Pro Phe Leu Ala Tyr Gly Glu Asp Gly Asp Gly Lys Asp Ile Pro Gly
225                 230                 235                 240

Gln Ala Ser Leu Val Phe Asp Val Ala Leu Leu Asp Leu His Asn Pro
                245                 250                 255

Lys Asp Ser Ile Ser Ile Glu Asn Lys Val Val Pro Glu Asn Cys Glu
            260                 265                 270

Arg Ile Ser Gln Ser Gly Asp Phe Leu Thr Tyr His Tyr Asn Gly Thr
        275                 280                 285

Leu Leu Asp Gly Thr Leu Phe Asp Ser Ser Tyr Ser Arg Asn Arg Thr
    290                 295                 300

Phe Asp Thr Tyr Ile Gly Gln Gly Tyr Val Ile Pro Gly Met Asp Glu
305                 310                 315                 320

Gly Leu Leu Gly Val Cys Ile Gly Glu Lys Arg Xaa Ile Val Val Pro
                325                 330                 335

Pro His Leu Gly Tyr Gly Glu Glu Gly Arg Gly Asn Ile Pro Gly Ser
            340                 345                 350

Ala Val Leu Val Phe Asp Ile His Val Ile Asp Phe His Asn Pro Ser
        355                 360                 365

Asp Ser Ile Ser Ile Thr Ser His Tyr Lys Pro Pro Asp Cys Ser Val
    370                 375                 380

Leu Ser Lys Lys Gly Asp Tyr Leu Lys Tyr His Tyr Asn Ala Ser Leu
385                 390                 395                 400
```

```
Leu Asp Gly Thr Leu Leu Asp Ser Thr Trp Asn Leu Gly Lys Thr Tyr
                405                 410                 415

Asn Ile Val Leu Gly Ser Gly Gln Val Val Leu Gly Met Asp Met Gly
            420                 425                 430

Leu Arg Glu Met Cys Val Gly Glu Lys Arg Thr Val Ile Ile Pro Pro
        435                 440                 445

His Leu Gly Tyr Gly Glu Ala Gly Val Asp Gly Glu Val Pro Gly Ser
    450                 455                 460

Ala Val Leu Val Phe Asp Ile Glu Xaa Leu Glu Leu Val Ala Gly Leu
465                 470                 475                 480

Pro Glu Gly Tyr Met Phe Ile Trp Asn Gly Glu Val Ser Pro Asn Leu
                485                 490                 495

Phe Glu Glu Ile Asp Lys Asp Gly Asn Gly Glu Val Leu Leu Glu Glu
            500                 505                 510

Phe Ser Glu Tyr Ile His Ala Gln Val Ala Ser Gly Lys Gly Lys Leu
        515                 520                 525

Ala Pro Gly Phe Asp Ala Glu Leu Ile Val Lys Asn Met Phe Thr Asn
    530                 535                 540

Gln Asp Arg Asn Gly Asp Gly Lys Val Thr Ala Glu Glu Phe Lys Leu
545                 550                 555                 560

Xaa Asp Gln Glu Ala Lys His Asp Val Thr Leu Asn Leu Ala
                565                 570
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<210> 7
<211> 1251
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (3)..(1166)

<400> 7

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ac acg tat ggg gaa att ggc tgg ctg att cct gga atg gat aaa ggg    47
   Thr Tyr Gly Glu Ile Gly Trp Leu Ile Pro Gly Met Asp Lys Gly
     1               5                  10                  15

ctg ctg ggg atg tgt gtg ggt gag aag cgc atc atc acc att cct cct   95
Leu Leu Gly Met Cys Val Gly Glu Lys Arg Ile Ile Thr Ile Pro Pro
                 20                  25                  30

ttt ctg gcc tat gga gag gat gga gat ggg aaa gac att ccc ggt cag   143
Phe Leu Ala Tyr Gly Glu Asp Gly Asp Gly Lys Asp Ile Pro Gly Gln
             35                  40                  45

gca tct ctg gtg ttt gat gtt gca tta ttg gac ctc cat aac ccc aag   191
Ala Ser Leu Val Phe Asp Val Ala Leu Leu Asp Leu His Asn Pro Lys
         50                  55                  60

gac agc att tcc att gag aac aag gta gta cct gaa aac tgt gag cgg   239
```

```
Asp Ser Ile Ser Ile Glu Asn Lys Val Val Pro Glu Asn Cys Glu Arg
     65                  70                  75

ata agt caa agt ggg gac ttt ctc agg tat cat tac aat ggc acg ctt   287
Ile Ser Gln Ser Gly Asp Phe Leu Arg Tyr His Tyr Asn Gly Thr Leu
 80                  85                  90                  95

ctg gat ggc acc ctc ttt gat tcc agc tac tct cgg aac cgc acg ttt   335
Leu Asp Gly Thr Leu Phe Asp Ser Ser Tyr Ser Arg Asn Arg Thr Phe
                100                 105                 110

gac acg tac att ggg cag ggc tac gtg att cct ggg atg gat gaa ggt   383
Asp Thr Tyr Ile Gly Gln Gly Tyr Val Ile Pro Gly Met Asp Glu Gly
            115                 120                 125

cta ctt ggt gtt tgc att gga gaa aag cga agg att gtg gtc ccg cct   431
Leu Leu Gly Val Cys Ile Gly Glu Lys Arg Arg Ile Val Val Pro Pro
        130                 135                 140

cac ctg ggg tat gga gag gaa gga aga ggg aat atc ccc ggc tcg gct   479
His Leu Gly Tyr Gly Glu Glu Gly Arg Gly Asn Ile Pro Gly Ser Ala
    145                 150                 155

gtg ctg gtg ttt gac atc cat gtg atc gac ttc cac aac cct tcg gac   527
Val Leu Val Phe Asp Ile His Val Ile Asp Phe His Asn Pro Ser Asp
160                 165                 170                 175

tcc atc agc atc acc tcc cac tac aaa ccc cct gac tgc tca gtg ctg   575
Ser Ile Ser Ile Thr Ser His Tyr Lys Pro Pro Asp Cys Ser Val Leu
                180                 185                 190

agt aag aag gga gat tac ctc aaa tat cac tac aat gcc tca ctt ctg   623
Ser Lys Lys Gly Asp Tyr Leu Lys Tyr His Tyr Asn Ala Ser Leu Leu
            195                 200                 205

gat ggg acc ctg ctg gac tcc acg tgg aat tta ggc aaa act tac aat   671
Asp Gly Thr Leu Leu Asp Ser Thr Trp Asn Leu Gly Lys Thr Tyr Asn
        210                 215                 220

att gtt ctg gga tct ggg caa gtt gtg ttg ggg atg gac atg ggt ctc   719
Ile Val Leu Gly Ser Gly Gln Val Val Leu Gly Met Asp Met Gly Leu
    225                 230                 235

aga gag atg tgc gtt ggc gag aaa cgg aca gtg atc att ccg cct cac   767
Arg Glu Met Cys Val Gly Glu Lys Arg Thr Val Ile Ile Pro Pro His
240                 245                 250                 255

ctg ggc tat ggg gaa gct ggc gtg gat gga gaa gtg ccc ggc agt gcc   815
Leu Gly Tyr Gly Glu Ala Gly Val Asp Gly Glu Val Pro Gly Ser Ala
                260                 265                 270

gta tta gtg ttt gac att gag ctg ctg gag ctg gtg gct ggc ctt cct   863
Val Leu Val Phe Asp Ile Glu Leu Leu Glu Leu Val Ala Gly Leu Pro
            275                 280                 285

gag ggg tac atg ttc ata tgg aat ggt gag gtg tca ccc aac ctc ttt   911
Glu Gly Tyr Met Phe Ile Trp Asn Gly Glu Val Ser Pro Asn Leu Phe
        290                 295                 300

gaa gaa atc aac aag gtg aca ttt ttc tgc tgc cca ttt gtg tcc tgg   959
Glu Glu Ile Asn Lys Val Thr Phe Phe Cys Cys Pro Phe Val Ser Trp
    305                 310                 315
```

```
aga cgg tgg tac cct gaa ggc aga ggc cag ctg ccg caa gac agc aat   1007
Arg Arg Trp Tyr Pro Glu Gly Arg Gly Gln Leu Pro Gln Asp Ser Asn
320                 325                 330                 335

gac agt cca cct gcc gac ctg att cct gca tca tgg aat aac cac atg   1055
Asp Ser Pro Pro Ala Asp Leu Ile Pro Ala Ser Trp Asn Asn His Met
                340                 345                 350

gct acc ttc tat cct ctg ttc cca aat ggt ggt ggc act tat cct gaa   1103
Ala Thr Phe Tyr Pro Leu Phe Pro Asn Gly Gly Gly Thr Tyr Pro Glu
            355                 360                 365

gtc gtc aat gat ttc cct ttg aaa cta ctt tat ttt act aat tta aac   1151
Val Val Asn Asp Phe Pro Leu Lys Leu Leu Tyr Phe Thr Asn Leu Asn
        370                 375                 380

tat ttt gta ctg atg tagccctgag gtagttcatg aaaaatgctg tgcactcatt   1206
Tyr Phe Val Leu Met
    385

ccatgggaat aaatgttggg aaagctgaaa aaaaaaaaaa aaaaa                 1251
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<210> 8
<211> 388
<212> PRT
<213> Homo sapiens

<400> 8

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Thr Tyr Gly Glu Ile Gly Trp Leu Ile Pro Gly Met Asp Lys Gly Leu
 1               5                  10                  15
Leu Gly Met Cys Val Gly Glu Lys Arg Ile Ile Thr Ile Pro Pro Phe
            20                  25                  30
Leu Ala Tyr Gly Glu Asp Gly Asp Gly Lys Asp Ile Pro Gly Gln Ala
        35                  40                  45
Ser Leu Val Phe Asp Val Ala Leu Leu Asp Leu His Asn Pro Lys Asp
    50                  55                  60
Ser Ile Ser Ile Glu Asn Lys Val Val Pro Glu Asn Cys Glu Arg Ile
65                  70                  75                  80
Ser Gln Ser Gly Asp Phe Leu Arg Tyr His Tyr Asn Gly Thr Leu Leu
                85                  90                  95
Asp Gly Thr Leu Phe Asp Ser Ser Tyr Ser Arg Asn Arg Thr Phe Asp
            100                 105                 110
Thr Tyr Ile Gly Gln Gly Tyr Val Ile Pro Gly Met Asp Glu Gly Leu
        115                 120                 125
Leu Gly Val Cys Ile Gly Glu Lys Arg Arg Ile Val Val Pro Pro His
    130                 135                 140
Leu Gly Tyr Gly Glu Glu Gly Arg Gly Asn Ile Pro Gly Ser Ala Val
145                 150                 155                 160
Leu Val Phe Asp Ile His Val Ile Asp Phe His Asn Pro Ser Asp Ser
                165                 170                 175
Ile Ser Ile Thr Ser His Tyr Lys Pro Pro Asp Cys Ser Val Leu Ser
```

```
                180                 185                 190

Lys Lys Gly Asp Tyr Leu Lys Tyr His Tyr Asn Ala Ser Leu Leu Asp
K   K   195G  D   Y   L   L   200Y  H   Y   N   A   205S  L   L   D

Gly Thr Leu Leu Asp Ser Thr Trp Asn Leu Gly Lys Thr Tyr Asn Ile
G   210T  L   L   D   S   215T  W   N   L   G   220K  T   Y   N   F

Val Leu Gly Ser Gly Gln Val Val Leu Gly Met Asp Met Gly Leu Arg
225V L   G   S   G   230N  V   V   L   G   235I  S   M   G   L   240R

Glu Met Cys Val Gly Glu Lys Arg Thr Val Ile Ile Pro Pro His Leu
E   M   C   V   245G  E   K   R   T   250V  I   I   P   P   255H  L

Gly Tyr Gly Glu Ala Gly Val Asp Gly Glu Val Pro Gly Ser Ala Val
G   Y   S   260E  A   G   V   D   265G  E   V   P   G   270S  A   V

Leu Val Phe Asp Ile Glu Leu Leu Glu Leu Val Ala Gly Leu Pro Glu
    V   275F  D   I   E   L   280L  E   L   V   A   285G  L   P   E

Gly Tyr Met Phe Ile Trp Asn Gly Glu Val Ser Pro Asn Leu Phe Glu
G   290 M   F   I   W   295N  G   E   V   S   300P  N   L   F   E

Glu Ile Asn Lys Val Thr Phe Phe Cys Cys Pro Phe Val Ser Trp Arg
305 E   I   N   K   V   310T  F   F   C   C   315P  F   V   S   W   320R

Arg Trp Tyr Pro Glu Gly Arg Gly Gln Leu Pro Gln Asp Ser Asn Asp
R   W   Y   P   325E  G   R   G   Q   330L  P   Q   D   S   N   335D

Ser Pro Pro Ala Asp Leu Ile Pro Ala Ser Trp Asn Asn His Met Ala
S   P   P   340A  D   L   I   P   345A  S   W   N   N   350H  M   A

Thr Phe Tyr Pro Leu Phe Pro Asn Gly Gly Gly Thr Tyr Pro Glu Val
T   F   355Y  P   L   F   P   360N  G   G   G   T   365Y  P   E   V

Val Asn Asp Phe Pro Leu Lys Leu Leu Tyr Phe Thr Asn Leu Asn Tyr
V   370N  D   F   P   L   375K  L   L   Y   F   T   380N  L   N   Y

Phe Val Leu Met
385
F   V   L   M
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